

# METHOD FOR FABRICATING A MASK ROM

## Abstract

The present invention discloses a method for fabricating a buried bit line of a mask ROM. The method includes providing a semiconductor substrate with a photoresist layer, and patterning the photoresist layer to form a photoresist pattern. A first ion implantation process is performed to form a first doped region in the semiconductor substrate not covered by the photoresist pattern. Then, an organic layer is coated on the photoresist pattern and the semiconductor substrate and an etching process is performed to form an organic spacer at two sides of the photoresist pattern. Finally, a second ion implantation process forms a second doped region in the semiconductor substrate not covered by the photoresist pattern and the organic spacer. Finally, the photoresist pattern and the organic spacer are removed.